

A NEW INDIAN DRAGONFLY. (ORDER—*ODONATA*)

BY

LT.-COL. F. C. FRASER, I.M.S., F.E.S.

(With 2 Text-figures)

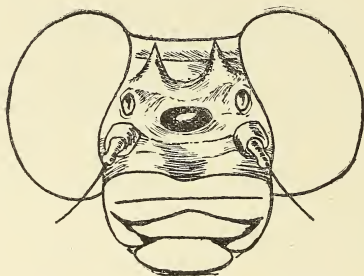


FIG. 1. Head of female *Leptogomphus bidentatus* sp. nov.

LEPTOGOMPHUS BIDENTATUS sp. nov.

Male. Abdomen 38 mm. Hindwing 33 mm.

Head black marked with yellow; labium with lateral lobes yellow; labrum black with a small yellow spot on each side; anteclypeus with a small median yellow spot; postclypeus and frons broadly yellow; vertex black but with a small rounded spot behind the ocelli and the whole of occiput yellow.

Prothorax black with a large yellow spot on the median and posterior lobes and a small spot on each side of the former.

Thorax black marked with yellow as follows, a mesothoracic collar interrupted in the middle, an oblique antehumeral stripe, the upper ends of which are squared and closely opposed to the antealar sinus, the lower ends pointed and divergent not meeting the mesothoracic collar; laterally marked with two broad yellow stripes, the posterior of which covers about four-fifths of the metepimeron; between these two stripes a small upper spot.

Legs black, spines of hind femora gradually lengthening towards the distal end, very robust and rather short; hind femora extending to distal end of segment 1.

Abdomen black marked with yellow as follows, segment 1 with a quadrate middorsal and a large lateral spot, its apical border narrowly yellow; segment 2 with a trilobate middorsal stripe and two large spots on each side, one of which includes the oreillet and extends to base of segment; segments 3 to 9 with paired subdorsal basal spots, which on segments 7 and 8 extend distad of the jugal suture; segment 10 with a small lateral spot.

Anal appendages black; superiors moderately broad at extreme base, then constricted and again dilating and tapering to apex somewhat like a carrot, the apex turning out and acute; seen in profile the basal two-thirds broad, the apical truncate and retrousse, furnished below with two ventral teeth, a basal small, and a submedian robust, the basal tooth lying in a plane internal to the median; inferior appendage barely one-third the length of superiors, broad, its apex with a small upturned spine on each side of a rather deep notch.

Wings hyaline tinted with yellow at the base; pterostigma black or dark yellow framed in black, braced, covering 3 to 4 cells; nodal index $\frac{14-15}{12-10} \frac{14-13}{10-13}$; triangles traversed once in the hindwings (twice in the hindwing of one female; 5 rows of cells in the anal field; anal loop absent).

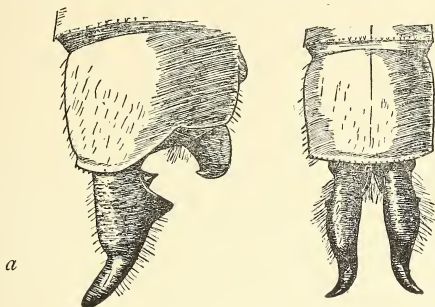


FIG. 2. *Leptogomphus bidentatus* sp. nov.

a. Lateral view of anal appendages. b. Dorsal view of same.

Female. Abdomen 38 mm. Hindwing 35 mm.

Markings very similar to those of male, abdominal markings differing as follows, segment 2 with the lateral spots confluent with one another to form a broad stripe; segments 3 to 6 with additional lateral spots in line with the basal, elongate on segments 3 and 4, very small and short on segments 5 and 6; segment 10 unmarked.

Anal appendages short, black, simple; vulvar scale one-fourth the length of segment 9, triangular, narrowly bifid so as to form two closely apposed scales.

Head of female with the vertex raised and sloping back as a thick quadrate plate, the hind corners of which are prolonged as robust spines.

Habitat. Shillong, Assam. Two females and one male taken by Mr. T. Bainbrigge Fletcher, 19, vii, 28. One female was found emerging on the side of a small cement tank. Type to be deposited in the British Museum.

This species is interesting from its extraordinary type of breeding place and also from the triangles of the hindwings being traversed, a characteristic shared by *L. retroflexus* Ris. and *L. scorpio* Ris. from both of which it however differs by the entirely different shape of the anal appendages and other characters. The shape of the superior anal appendages will also serve to differentiate it from other species, *L. semperi* Selys, *L. assimilis* Krug., *L. gracilis* Krug., *L. gestroi* Selys, *L. lansbergei* Selys. From *L. inclitus* Selys, female only known, it is to be distinguished by the frons yellow and by the absence of a humeral stripe. The genitalia appear to ally it closely to *L. sauteri* Ris., *L. perforatus* Ris. and *L. scorpio* Ris., the tapering ends of the superior appendages distinguishing it from the two former species.